### Bank stabilization

Pond bottoms, slopes, and banks should be inspected periodically for signs of erosion, excessive sediment accumulation, and other damage. Bare patches should be reseeded and stabilized quickly to prevent erosion. Woody trees and plants destabilize embankments and should be prevented from growing by routine mowing practices. Trees and shrubs should also be planted away from maintenance access to the pond and structures for maintenance and repair.



### Cobb County Code Sec. 50-112.

" (a) All commercial/industrial stormwater management facilities in the county shall be maintained by the owners thereof in such a manner as to maintain and enhance the public health, safety, and general welfare in order to be assured that such facilities are safe and will not result in injury or harm to persons or property, to reduce and minimize damage to public and private property, to reduce and minimize the impact of such facilities on land and stream channel erosion, to assist in the attainment and maintenance of water quality standards, to reduce local flooding, and to maintain, as nearly as possible, the preexisting development runoff characteristics of the area. All such maintenance of such facilities shall be at the sole cost and expense of the owners thereof."

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## **Stormwater Management Facilities**

Stormwater management facilities are structures and facilities (Stormwater ponds, swales, ditches, and other structures) that are designed to convey and store excess runoff from developed areas. Detention ponds are a common stormwater facility utilized by residential and commercial areas for water quality and quantity control. Primarily designed to control peak run-off to predevelopment levels, detention ponds can mitigate flooding when properly designed. If properly maintained they also mitigate pollution to stormwater runoff from urbanization and help preserve streams, creeks, ponds, lakes and other aquatic habitats.

### **DETENTION POND TYPES**

## **Wet Detention Pond (Retention)**

Wet detention ponds have a permanent pool of water. Runoff from rain events are stored and treated in the pool through settling and biological mechanisms.



## **Dry Detention Pond**

Dry detention ponds typically store water for only short periods of time after rainfall events and are the most common detention pond in Cobb County. Dry ponds are usually grassed and are dry between rain events.



### **Concrete Detention Pond**

Concrete detention ponds are usually dry detention ponds with concrete walls. These are often seen in commercial areas to minimize the space taken up by these facilities.



## COMMON PROBLEMS FOUND IN COBB COUNTY

- Trees and brush growing in ponds
- · Grass and weed overgrowth
- Trash
- Erosion of the slopes in ponds
- Blocked inlet/outlet pipes
- Deteriorated pipes and/or outlet control structures

# MAINTENANCE OF PONDS Routine Maintenance

Regular maintenance should occur monthly. This will reduce long-term costs, ensure proper storage volumes are maintained, and improve non-point source pollutant control.

## Vegetation

Vegetation should be kept healthy and under control. Grasses should be kept between 6 to 8 inches and no higher than 12 inches. Unwanted vegetation should be removed including any dead vegetation. Remove trees and brush before trunks are greater than 1 inch.



#### Trash

Trash can cause damage and reduce effectiveness of your facility. After major rain events check every inlet and outlet for trash and other materials. Removal helps to prevent blockages, mosquito habitats, and damage to vegetation while maintaining the appearance of the facility.



### **Non-routine Maintenance**

Non routine maintenance occurs after years of accumulation and/or lack of regular maintenance. Non routine maintenance tends to have a higher cost associated with it. However, it will occur less often with a good regular maintenance program in place.

## **Sediment Removal**

Ponds should be cleaned of sediment buildup when accumulated sediment depths exceed nine inches. Wet ponds should be dredged when sediment levels are within 3 feet from normal water surface or when sediment islands begin forming. Some ponds have sediment markers in the pond to help owners identify when they need to have the accumulation removed. Preventative maintenance can extend the time between sediment removal which can be costly.

